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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,729	05/27/2005	Michael Barry Gravestock	100859-1P US	4310
44992 7590 10/23/2006			EXAMINER	
	NECA R&D BOSTON		CHU, YONG LIANG	
35 GATEHOUSE DRIVE WALTHAM, MA 02451-1215		•	ART UNIT	PAPER NUMBER
	•		1626	· -
			DATE MAILED: 10/23/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Comments	10/536,729	GRAVESTOCK ET AL.			
Office Action Summary	Examiner	Art Unit			
	Yong Chu	1626			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on <u>07 Sectors</u>	eptember 2006.	4.0			
	action is non-final.				
3) Since this application is in condition for allowar					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1,3,5-9,11,15 and 18-23</u> is/are pendir	g in the application.				
4a) Of the above claim(s) <u>15 and 19</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed					
6)⊠ Claim(s) <u>1,5-9,11-13,18, and 20-23</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers		•			
9) The specification is objected to by the Examine	г.				
10) The drawing(s) filed on is/are: a) acc	epted or b) objected to by the l	Examiner.			
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119		· · · · · · · · · · · · · · · · · · ·			
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).			
1. Certified copies of the priority document	s have been received.	·			
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the prior	rity documents have been receive	ed in this National Stage			
application from the International Bureau	ս (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list	of the certified copies not receive	ed.			
,		•			
Attachment(s)	4) Interview Summary	(PTO 413)			
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F 6) Other:	Patent Application			

Art Unit: 1626

DETAILED ACTION

Claims 1, 5-9, 11-13, 15, and 18-23 are pending in this application. Claims 15 and 19 are withdrawn as non-elected invention. Therefore, claims 1, 5-9, 11-13, 18 and 20-23 are examined on the merits.

Response to Arguments

The Amendments by Applicants' representative John X. Haberman dated on 7 September 2006 has been entered.

Obviousness-Type Double Patenting

The provisionally double patenting rejection of claims 1, 7-9, 11-12, and 18 over claims 1-10 of co-pending U.S. Application Nos. 10/636,686 is maintained. Applicant needs to file Terminal Disclaimer or amend the claims to overcome the rejection.

Arguments under 35 U.S.C.§102(e)

Applicant's arguments see page 1 over claims 1, 7-9, 11-13, 18 and 20-23 under 35 U.S.C.§102(e) on the ground that the prior art reference WO 03/022824 (Gravestock et al.) does not teach a compound at least one of \mathbf{R}_{3a} and \mathbf{R}_{5a} is not H. Therefore the §102(e) rejection is not appropriate. Applicant's argument is persuasive, and the rejection *under 35* U.S.C.§102(e) over claims 1, 7-9, 11-12, and 18 is withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the same reference under 103(a) rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1626

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5-9, 11-13, 18, and 20-23 are rejected under 35 U.S.C. 103 (a) as unpatentable over Gravestock et al. WO 03/022824.

Applicants instant elected invention in Claims 1, 5-9, 11-13, 15, 18, and 20-23

related to compounds of formula (I)

1 of the amendment dated on 7 September, 2006, their pharmaceutically acceptable salts and their pharmaceutical compositions thereof wherein:

A and B are independently selected from

Art Unit: 1626

R₂b and R₆b are independently selected from H, F, CI, -OMe, Me, Et, and -CF₃;

The rest substituents are defined as in Claim 1 of the Amendment file on May 15, 2006.

Determination of the scope and content of the prior art (MPEP §2141.01)

Gravestock et al. disclose a specific compound of Example 16

related to the instant claims 1, 5-9, 11, 13, 18, and 20-23 wherein:

C is
$$R_{5}a$$
 $R_{5}a$ $R_{6}b$, wherein $R_{2}a$ = $R_{5}a$ = $R_{6}b$ = H, and $R_{6}a$ = $R_{2}b$ = F

R₁a is -NHCOCH₃;

and
$$\mathbf{R_1b}$$
 is \mathbf{RT} , wherein RT is $-\mathbf{CH_3}$.

Art Unit: 1626

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the said specific compound of Gravestock and the instantly claimed compounds is that Gravestock does not teach the said compound with R_3a and/or R_5a is H, (1-4C)alkyl and at least one of R_3a and R_5a is not H. Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

The instantly claimed compounds would have been obvious over

Gravestock compound having R₃a and/or R₅a is/are H, (1-4C)alkyl, because one skilled in the art would have been motivated to prepare homolog of the compounds with R₃a and/or R₅a is/are H, (1-4C)alkyl with the expectation of obtaining compounds which could be used in the related compounds or composition for the same utility of anti-bacterial infection. To those skilled in the chemical art, one homologue is not such an advance over adjacent member of series as requires invention because chemists knowing properties of one member of series would in general know what to expect in adjacent members. *In re Henze*, 85 USPQ 261 (1950). Therefore, the instant claimed compounds would have been suggested to one skilled in the art.

Conclusion

No claims are allowed.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Chu whose telephone number is 571-272-5759. The examiner can normally be reached on 7:00 am - 3:30 pm EST.

Art Unit: 1626

Telephone Inquiry

Page 6

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. M^cKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yong Chu, Ph.D.

Patent Examiner

Art Unit 1626

Joseph K. MºKane

Supervisory Patent Examiner

Art Unit 1626